DETERMINANTS OF FINANCIAL INSTRUMENTS DISCLOSURE QUALITY AMONG LISTED FIRMS ON NAIROBI SECURITIES EXCHANGE

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ABSTRACT

The objective of this study was to determine the influence of liquidity, leverage and market risk on financial instruments disclosure quality among listed firms in Kenya. The target population for this research comprised of companies listed at the Nairobi Securities Exchange. This study examined a sample of fifty-nine listed firms. This empirical study developed an un-weighted disclosure index consisting of forty-six disclosure items and the scores were used to measure financial instruments disclosure quality. Data were mainly collected from firms' annual reports. The collected secondary data was analyzed using Stata software where descriptive and inferential statistics were generated. Using multiple regression model, this research study modelled four factors (profitability, liquidity, leverage and market risk) which determine financial instrument disclosure quality. Correlation and panel multiple regression analysis were employed to test four hypotheses and determine association between the independent variables and the dependent variable. From study findings, both descriptive and inferential statistics revealed an average disclosure index of seventy-eight point two per cent. The study revealed that liquidity and leverage are significantly and positively associated with financial instrument disclosure quality. The study further revealed that market risk has an insignificant relationship with financial instrument disclosure quality. Firms should provide high quality financial instrument disclosures to the various stakeholders in order to restore investor confidence minimize information asymmetry and enable informed investment decision making. Further research is encouraged to establish whether the determinants of disclosure would be the same if a weighted disclosure index was used to determine disclosure quality in the Kenyan context.

Key Words: *Liquidity, Leverage, Market Risk*

INTRODUCTION

Different financial instruments have different degrees of risk. They expose firms to financial, economic, and operational risk. According to Hassan, Saleh and Rahman (2008), firms essentially confront exposure to financial and economic risks which result from changes in market conditions or financial position of the parties to financial instruments and transactions that the said firms handle. This complex and ever-changing business environment has brought to the fore the necessity and importance of developing reliable and relevant disclosure norms to help protect all stakeholders, as derivatives, due to their underlying complex nature, can be a significant source of systematic risk (Kota & Charumathi, 2018).

Globally there have been numerous studies on determinants of financial instrument disclosure quality in corporate annual reports by companies in developed economies in the past two decades (Hassan, Mohd-Saleh & Rahman, 2008; Malaquias & Lemes, 2013; Adznan & Nelson, 2015; Takhtaei, Mousavi, Tamimi & Farahbakhsh, 2014).

A significant number of disclosure studies have been conducted in Africa (Oluwagbemiga, 2014; Hassan, 2014; Hussainey, 2014, Shehata, 2014; Mensah, 2015). Agyei-Mensah (2015) examined the determinants of financial ratio disclosures and quality of listed companies on the Ghana Stock Exchange and found the extent of financial ratio disclosure level of 62.78%. Further, the results showed that leverage and return on investment are associated on a statistically significant level as far as the extent of financial ratio disclosure is concerned. Kribat, Burton and Crawford (2013) investigated the degree of compliance with mandatory disclosure requirements by Libyan Banks and established an overall mean disclosure compliance of 54.45%. They found that while many items are disclosed on a regular basis, on average, barely more than half of all possible items appear in the annual reports. The study found higher compliance with regard to mandatory disclosure, which was influenced by bank profitability.

Provision of quality disclosures in financial statements is important as it enables users to evaluate the significance of financial instruments for the entitys financial position and performance; and the nature and extent of risks arising from financial instruments. Adoption of quality disclosure compliance is valuable in terms of promoting financial stability, both globally and locally, reduces risk of failure of companies and fosters economic growth.

The NSE plays a vital role in the growth of Kenya's economy by encouraging savings and investment, as well as helping local and international companies access cost-effective capital. NSE operates under the jurisdiction of the Capital Markets Authority of Kenya. It is a full member of the World Federation of Exchange, a founder member of the African Securities Exchanges Association (ASEA) and the East African Securities Exchanges Association (EASEA). The NSE is a member of the Association of Futures Market and is a partner exchange in the United Nations-led SSE initiative (NSE 2017-18 Handbook).

Statement of the Problem

Proper financial instrument disclosure overcomes the mispricing of financial instruments, crystallization of risk and misallocation of capital. Further, it enhances investors ability to make sound investment decisions and ability to provide market discipline on a timely basis. Additionally, it contributes to disorderly capital market corrections in the valuation of companies securities and analysis during crises as investors belatedly recognize that disclosing firms are riskier than they were assumed to be.

A study by Gathaiya (2017) found that transparency and disclosure issues were partly to blame for the failure of Dubai Bank, Imperial Bank and Chase Bank between the year 2015 and 2016. Financial reporting of the collapsed banks was less transparent and credible. Imperial bank deployed a software-reporting program, which ensured fictitious, unlawful and fraudulent accounts were

created and used to defraud depositors and concealed non-performing loans and provisioning figures. These were not reflected in the banks financial statements, and its true financial position was understated, thus creating information asymmetry.

Most studies (Ogwe, 2014; Mathuva, 2016; Abanga, 2017; Wachira, 2017; Wachira, 2018) conducted in Kenya investigated the level of financial, risk and corporate disclosures for non-financial institutions for a period one to six years. These studies gave contradicting and inconclusive results on the relationship between disclosures and gearing level and liquidity. The authors recommended further research to be done for a longer period to capture periods of various trade cycles in order to give broader dimension for the problem and establish the effect of leverage on financial reporting and other possible determinants of financial instrument disclosure quality among listed firms. This study was conducted to fill this gap empirically.

Objectives of the Study
The general objective of this study was to find out the determinants of financial instruments disclosure quality among listed firms in Kenya. The study was guided by the following specific objectives:

- To determine the influence of liquidity on financial instruments disclosure quality among listed firms in Kenya.

- To determine the influence of leverage on financial instruments disclosure quality among listed firms in Kenya.

- To determine the influence of market risk on financial instruments disclosure quality among listed firms in Kenya.

LITERATURE REVIEW

Disclosure Quality
High quality disclosure is all about providing investors with useful information that keeps them aware of possible scenarios of the company and helps them make informed value creating decisions

(Lindqvist, 2016). Pownall and Schipper (1999) argue that disclosure is of high quality if financial reports possess three attributes: transparency, full disclosure and comparability. Transparent financial statements are statements that reveal the events, transactions, judgments, and estimates underlying the statements, and their implications Transparency allows users to see the results and implications of the decisions, judgments and estimates of statement preparers. Full disclosure relates to the provision of all information necessary for decision-making, thereby providing reasonable assurance that investors are not misled. Finally, comparability means that similar transactions and events are accounted for in the same manner, both cross-sectionally among firms and over time for a given firm.

Signaling Theory
Spence (1973) developed signaling theory as a means to describe people conducts in the labour market. It has a general phenomenon, which is applicable to and concerned with the problems relating to information asymmetries in markets, and illustrates how the party with more relevant information can reduce these asymmetries by signaling it to others (Morris, 1987). Watts and Zimmerman (1986) stipulated that the asymmetric information surrounding an organization and investors causes adverse selection. This is mitigated by disclosure, and providing signals to calm the market. According to Connelly, Certo, Ireland and Reutzel (2011), signaling theory is useful in describing disclosure behaviour when two organizations have access to different information.

Legitimacy Theory
Legitimacy theory aims to explain accounting choice in relation to avoidable future costs. The theory can be traced back to Dowling and Pfeffer (1975) who argued that the social perceptions of an organizations activities should be reported in accordance with the expectations of the society. The theory is derived from the broader political economy perspective and has been used as a further academic theory in accounting literature to

explain managements motivations for particular voluntarily information disclosure (Hawashe, 2014). Suchman (1995) considers legitimacy as a perception that the actions of an organization are desirable, proper or appropriate within some acceptable social norms, values, beliefs and definitions. Legitimacy theory has widely been used as an attempt to explain social and environmental reporting practices of an organization in order to fulfil the social contract that enables them achieve their objectives (Branco & Rodrigues, 2006; Deegan & Blomquist, 2006; Islam & Deegan, 2008).

Conceptual Framework

Liquidity	
▪ Current ratio	
▪ Acid-test ratio	

Leverage
- Debt-Asset ratio
- Debt-Equity ratio

Market Risk
- Value at risk

Financial Instrument Disclosure Quality
- Disclosure Index
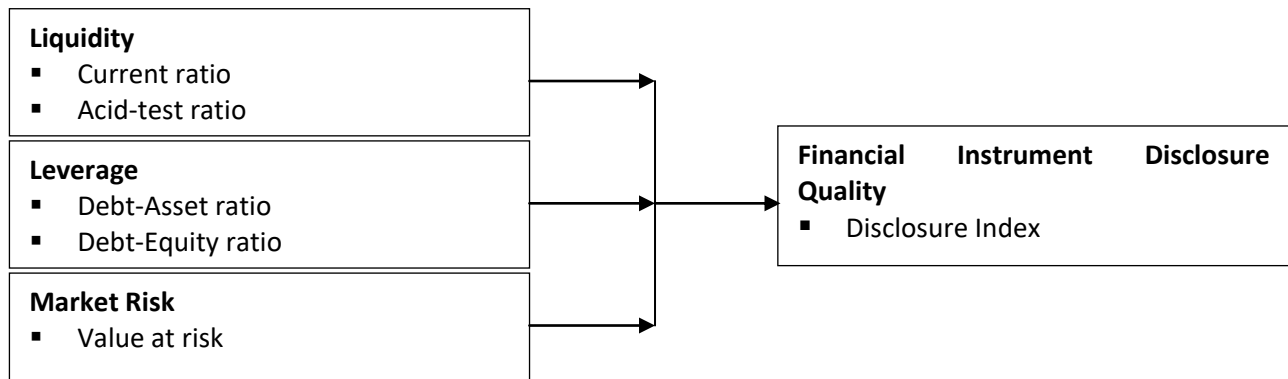
Independent Variables　　　　　　　**Dependent Variable**

Figure 1: Conceptual Framework

The firm leverage indicates the level of indebtedness of the business, which refers to the degree of financial risk that is faced by the business (Hassan, 2014). Leverage is measured by the ratio of long-term debt to owners equity. This measure is used in existing studies (Barako, Hancock & Izan, 2006; Sutthachai & Cooke, 2009; Juhmani, 2013). Leverage is also measured by the total debt to total assets ratio; this ratio is considered as an alternative way to measure the leverage. Business firms perceived by the market as having high levels of leverage, are exposed to costs of control. These firms are increasingly motivated for the expansion of disclosure to reduce control costs that may be incurred by the shareholders when investing in these firms, and also to meet the needs of the creditors and lenders (Jensen & Meckling, 1976).

High leverage firms may trend toward the expansion of the disclosure of the risks, due to the pressure to clarify and interpret the engines of these risks (Linsley & Shrives, 2006; Neri, 2010), or provide a signal to interested stakeholders about how the company measures and manages such risks effectively (Abraham & Cox, 2007). This is also supported by the Winter(2010) when he concluded that the high levels of leverage may affect the quality of the disclosure of the risks based on firms with high leverage levels may expand their disclosure for the risks in order to avoid the risk of litigation if they do not disclose sufficient information about the potential risks.

Previous studies have yielded mixed results. (Uyar, Kilic & Bayyur, 2013; Takhtaei *et al., 2014)* have indicated that there is a positive relation between leverage and disclosure quality. These results demonstrated that companies with huge debts are enforced to disclose more information to satisfy their creditors (Zare, Kiafar, Rasouli, Sadeghi, & Behbahani*, 2013*). Thus, companies with higher financial leverage are likely subjected to more agency costs; hence, it may presume that there is a direct association between financial leverage and FRQ (Murcia, 2010). On the contrary, Connors and Gao (2011), Monday and Nancy (2016) found leverage to be significant and negatively related to FDQ. This result was not consistent with the agency cost theory and lends support to the dispute that companies with greater debt are more probably

tend to disclose fewer public information (Connors and Gao, 2011). However, Fathi (2013), Haji and Ghazali (2013) and AL-Asiry (2017) found leverage to be not statistically significant in explaining the quality of financial reporting. These results provided strong evidence that leverage does not significantly enhance quality disclosure of information (Khlif and Souissi, 2010).

METHODOLOGY

This study adopted descriptive research design. The population of this study was all the 62 firms which were listed on Nairobi Securities Exchange, Kenya during the period 2012 to 31.12.2018. The sampling frame was the Nairobi Securities Exchange (NSE) in Kenya. A list of 62 firms listed on the NSE formed the sampling frame for the research. This study adopted purposive sampling as the researcher only selected listed firms which had data for a 7-year period from 2012-2018. The data type collected and utilized in the study was purely secondary data based on the annual reports of listed companies disclosed in their financial information for the period 2012 to 2018 through NSE web portal and firm website. Data analysis involved both descriptive and inferential statistics where model specification estimation and rationale of variables was done. The descriptive statistics (mean and standard deviation) was mainly used to show the trend of the data. Inferential statistics on the other hand measure or shows the relationship between or among variables. Inferential statistics include regression and correlation.

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

Response Rate

The study sampled 62 listed firms for the period between 2012 and 2018. For this study, 59 listed firms were used as their financial data for a 7-year period 2012 to 2018 were available giving a response rate of 95.2%.

Effect of Liquidity on Financial instruments disclosure

The study sought to determine the influence of liquidity on financial instruments disclosure quality among listed firms in Kenya. Liquidity in this study was measured using Acid test ratio and current ratio. Having gone by the random effect model basing on the Haussmann LM test, the results of the random effect model are presented in Table 1.

Table 1: Regression Random Effect of liquidity on Financial instruments disclosure

Random-effects GLS regression				Number of obs	=		413
Group variable: FIRM				Number of groups	=		59
R-sq:				Obs per group:			
within =	0.0000			min =			7
between =	0.0000			avg =			7
overall =	0.0859			max =			7
				Wald chi2(2)	=		38.52
corr(u_i, Xb)	= 0 (assumed)			Prob > chi2	=		0.0000

FID	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
CR	0.017834	0.0066968	2.66	0.008	0.004708	0.030959
ATR	0.011624	0.0065338	-1.78	0.067	0.02443	0.001182
_cons	0.675155	0.0021604	312.52	0.000	0.670921	0.67939
sigma_u	0					
sigma_e	.04206607					
Rho	0	(fraction of variance due to u_i)				

The analysis shows that the panels were strongly balanced for this analysis as shown by the number of observations per group. There were a total of 413 observations used in this analysis considering 59 groups of entities implying strongly balance panels. The minimum, maximum and average numbers of observations per groups were all equal to 7.

The result obtained from random effect model indicated that liquidity accounted for 8.59% (Overall R square=0.0859) of the variation in financial instrument disclosure quality among listed firms in Kenya. To test the goodness of fit, the study computed Wald chi-square since the model used random effect regression analysis. The findings revealed Wald chi-square = 38.52 with a corresponding p-value =0.0000. The partial regression coefficient for current ratio was 0.017834 shows that increase in one percent in current ratio across time and listed firms in Kenya makes financial instruments disclosure to increase by 0.017834 per cent. Further, the partial regression coefficient for Acid test ratio was 0.011624 shows that increase in one percent in acid test ratio across time and listed firms in Kenya makes financial instruments disclosure to increase by 0.011624 per cent.

The regression model is as shown below

$$FID_{it}=0.675155+0.017834CR+0.011624ATR$$

From the above results, only current ratio has significant positive effect of financial instrument disclosure while acid test ratio has insignificant positive effect on financial instrument disclosure. The result confirmed findings by Andrew (2015) and Amr (2016) who found positive significant relationship between quality of financial information and liquidity. However, Hussainery, Elsayed, and Razik (2011) have contrary opinion arguing that low liquidity companies may disclose more information in order to satisfy the information requirements of stakeholder.

Effect of Leverage on Financial instruments disclosure

Leverage in this study was measured using debt equity ratio and debt asset ratio. Having gone by the random effect model basing on the Haussmann LM test, the results of the random effect model are presented in Table 2.

Table 2: Regression Random Effect of leverage on Financial instruments disclosure

Random-effects GLS regression				Number of obs	=	413
Group variable: FIRM				Number of groups	=	59
R-sq:				Obs per group:		
within =	0.0000			min =		7
between =	0.0000			avg =		7
overall =	0.1824			max =		7
				Wald chi2(2)	=	91.46
corr(u_i, Xb)	= 0 (assumed)			Prob > chi2	=	0.0000

FID	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
DER	0.001369	0.001224	1.12	0.263	-0.00103	0.003768
DAR	0.032831	0.004227	7.77	0.000	0.024545	0.041116
_cons	0.682581	0.002005	340.51	0.000	0.678652	0.68651
sigma_u	0					
sigma_e	.03788039					
Rho	0	(fraction of variance due to u_i)				

The result obtained from random effect model indicated that leverage accounted for 18.24% (Overall R square=0.1824) of the variation in financial instrument disclosure quality among listed firms in Kenya. To test the goodness of fit, the study computed Wald chi-square since the model used random effect regression analysis. The findings revealed Wald chi-square = 91.46 with a corresponding p-value =0.0000. The partial regression coefficient for debt equity ratio was 0.001369 shows that increase in one percent in debt equity ratio across time and listed firms in Kenya makes financial instruments disclosure to increase by 0.001369 per cent. Further, the partial regression coefficient for Debt asset ratio was 0.032831 shows that increase in one percent in debt asset ratio across time and listed firms in Kenya makes financial instruments disclosure to increase by 00.032831 per cent.

The regression model is as shown below

$$FID_{it}=0.682581+0.001369DER+0.032831DAR$$

From the above results, only debt asset ratio has significant positive effect of financial instrument

disclosure while debt equity ratio has insignificant positive effect on financial instrument disclosure.

The results confirmed findings by Winter(2010) who concluded that high levels of leverage may affect the quality of the disclosure of the risks based on firms with high leverage levels may expand their disclosure for the risks in order to avoid the risk of litigation if they do not disclose sufficient information about the potential risks. Mensah (2015) also showed that leverage is associated on a statistically significant level as far as the extent of financial ratio disclosure is concerned. However, Connors and Gao (2011), Monday and Nancy (2016) found leverage to be significant and negatively related to FDQ.

Effect of Market risk on financial instruments disclosure

The study sought to determine the influence of market risk on financial instruments disclosure quality among listed firms in Kenya. Market risk in this study was measured using value at risk. The results of the random effect model are presented in Table 3.

Table 3: Regression Random Effect of market risk on Financial instruments disclosure

Random-effects GLS regression				Number of obs	=	413
Group variable: FIRM				Number of groups	=	59
R-sq:				Obs per group:		
within =	0.0000			min =		7
between =	0.0000			avg =		7
overall =	0.0160			max =		7
				Wald chi2(2)	=	0.26
corr(u_i, Xb) = 0 (assumed)				Prob > chi2	=	0.6087

FID	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
VaR	0.000669	0.001306	0.51	0.600	-0.00189	0.003228
_cons	0.672124	0.01552	43.31	0.000	0.641706	0.702542
sigma_u	0					
sigma_e	.04415683					
Rho	0	(fraction of variance due to u_i)				

The result obtained from random effect model indicated that market risk accounted for 1.6%

(Overall R square=0.0160) of the variation in financial instrument disclosure quality among listed

firms in Kenya. To test the goodness of fit, the study computed Wald chi-square since the model used random effect regression analysis. The findings revealed Wald chi-square = 0.26 with a corresponding p-value =0.600. The partial regression coefficient for value at risk was 0.000669 shows that increase in one percent in debt equity ratio across time and listed firms in Kenya makes financial instruments disclosure to increase by 0.000669 per cent. The regression model is as shown below

CONCLUSIONS AND RECOMMENDATIONS

The study found a positive significant relationship between disclosure quality and liquidity. That implied that companies which are highly liquid are expected to have great impact on disclosure quality. Highly liquid firms may desire to make their level of liquidity known through disclosure in their annual reports and those suffering from liquidity might be induced to amplify their disclosure to mitigate fears and notify shareholders that management knows the problem.

The results of the study indicated that there is significant relationship between financial instruments disclosure and leverage at 5% significance level. This implies that increase in leverage would result to significant increase in financial instruments disclosure. From the finding of significant and positive relationship between leverage and FIDQ, it was concluded that companies with huge debts are obligated to disclose more information to satisfy their creditors.

The results indicated an insignificant relationship between financial instruments disclosure and market risk. This implies that increase in market risk as measures by value at risk would result to

$FID_{it}=0.672124+0.000669VaR$

From the above results, value at risk has insignificant positive effect on financial instrument disclosure. The result is confirmed by Elshandidy and Neri (2013) who indicated that firms with higher risks usually disclose more information in order to avoid misunderstandings among investors, and this is consistent with Elshandidy and Neri (2013). Firth, Fung and Rui, (2007) found a positive relationship between risk profile and the level of earnings disclosure in the Chinese market. insignificant increase in financial instruments disclosure.

Firms should provide high quality financial instrument disclosures to the various stakeholders in order to restore investor confidence, minimize information asymmetry and enable informed investment decision making. These can be achieved by strict adherence to disclosure guidelines that financial and accounting regulators have formulated.

Suggestions for Further Studies

The current study suggests that a further study should be carried to determine the relationship between market risk as measured by value at risk and financial instruments disclosure in the annual reports for companies listed at NSE. This would lead to determination on whether there would be a significant association between those two variables.

Further research is encouraged to establish whether the determinants of disclosure would be the same if a weighted disclosure index was used to determine disclosure quality in the Kenyan context.

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